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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,841	03/23/2004	Narito Goto	KOY-30	4250

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LUCAS & MERCANTI, LLP
475 PARK AVENUE SOUTH
15TH FLOOR
NEW YORK, NY 10016

EXAMINER

CHEA, THORL

ART UNIT

PAPER NUMBER

1752

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/806,841	Applicant(s) GOTO, NARITO	
	Examiner Thorl Chea	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/26/05.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
 4a) Of the above claim(s) 1-25 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 26, 28-37 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to the communication on September 26, 2005; claims 1-37 are pending in this instant application; claim 27 has been canceled; claims 1-25 are withdrawn from consideration as being drawn to non-elected invention.
2. Applicant's election without traverse of claims 26-37 in the reply filed on September 26, 2005 is acknowledged.
3. The English translation of the foreign priority document and the Terminal Disclaimer on September 26, 2005 obviate the rejection under 35 U.S.C. 102(e) as being anticipated by Kashiwagi et al (US 2004/0106074); the rejection under 35 U.S.C. 102(e) as being anticipated by Kashiwagi et al (US 2004/0115569A1), and the provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/718,295, and of copending Application No. 10/727,313. The rejections are withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26, 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Biavasco et al (US Patent No. 5,330,864), Fukui et al (US 2002/0102502) and Cerquone et al (US Patent No. 4,021,240) .

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Biavasco et al discloses a photothermographic material substantially as claimed. See the abstract wherein the material comprises silver source material, light sensitive silver halide in catalytic proximity to said silver source material, binder and a chromogenic cyan leuco dye. The use of chemical sensitizer such as sulfur or selenium to chemically sensitize the silver halide emulsion is shown in column 14, lines 11-59; the organic silver salt which is can be used is a silver salt which is a comparatively stable to light, but form silver image when heated to 80 °C or higher in the presence of an exposed photocatalyst such as silver halide and reducing agent is shown in column 12, lines 59-69. Fukui et al disclose a phenol compound as reducing agent for silver salt of an organic acid in column 2, formula (I), (II) in the abstract and pages 3-4 compound 1-1 to 1-20, the silver halide grains having grain size of 0.01 micron to 1.15 micron in on page 13, [0099]; the binder having glass transition temperature of 10 °C to 80 °C on pages 13, [0132]; and the amount of an organic salt in an amount of 0.1 to 5 g/m² on page 13, [0095]; the surfactants and hydrazine compound on page 37, development accelerator-1 and compound F-1 to F-8. Cerquone et al in column 6, lines 30-69 discloses the a reducing agent for organic silver to produce a desired dye in the imagewise exposed area of the photothermographic element. It disclosed that "it is believed that the reducing agent react with silver salt oxidizing agent in the element of this invention to produce a desired dye in the imagewise exposed area of the photothermographic element. It is believed that the latent image silver produced upon imagewise exposure catalyses the reaction between the reducing agent and the silver oxidizing agent."

The invention discloses in Biavasco et al differs from that of the present claimed invention in its failure to disclose the use of the reducing agent and the phenol compound of formula (YA)

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claimed in the present claimed invention, but the compound YA and the reducing agent has been known as reducing agent for organic silver salt such as taught in Fukui et al. Moreover, it has been known to use the reducing agent in color photothermographic material to produce a desired dye in the imagewise exposed area such as taught in Cerquone et al. It would have been therefore obvious to the worker of ordinary skill in the art at the time the invention was made to include the reducing agents taught in Fukui et al in the material of Biavasco et al with an expectation of producing produce a desired dye in the imagewise exposed area of the photothermographic element, and thereby provide the invention as claimed.

Response to Arguments

6. Applicant's arguments filed September 26, 2005 have been fully considered but they are not persuasive for the reason set forth in rejection above. The system taught in Biavasco et al is substantially similar to that of the claimed invention, which is a material containing a cyan chromogenic leuco dye, light sensitive silver halide, silver source and binder. Biavasco et al does not disclose the use of a reducing agent of formula (1) and the formula (YA) claimed in the present claimed invention, but these reducing agent system is taught in Fukui et al as system of reducing agent for silver source. Cerquone et al discloses a color photothermographic material containing both a color developing agent and the reducing agent for silver source. It was discovered in Cerquone et al to use reducing agent for silver source in combination with the color developing agent useful in forming a dye to produce a desired dye in the imagewise exposed area of the photothermographic element. Therefore, it would have been obvious to the worker of ordinary skill in the art to use the system of reducing agent taught in Fukui et al in the material that contains a cyan a cyan chromogenic leuco dye and silver source of silver with an

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expectation of producing a desired dye image. The compound YA claimed in the present invention is a compound of formula (II) taught in Fukui et al on page 39, column 1. This phenolic compound is used in combination with the bis-phenol reducing agent to increase the speed of development of a photothermographic material. It is not a yellow coloring leuco dye presented in the applicants' argument. The issue in this case is whether it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the reducing agent for a silver salt of an organic acid in the system containing silver source taught in Biavasco et al. The use of the reducing agent for silver source in a system containing color developing agent and silver source has been known in Cerquone et al. Therefore, it would have been obvious to the worker of ordinary skill in the art in view of Cerquone et al teaching to use a known system of reducing agent taught in Fukui et al in the material of Biavasco with an expectation of success.

The argument with respect to the unexpected results submitted on September 26, 2005 is not persuasive. First, the results is irrelevant to the Biavasco which discloses the cyan leuco dye which is considered as the closest reference. The comparative samples 1-1 and 1-3 is considered as black and white photothermographic material, while the material of the claimed invention contains a cyan leuco dye. Second, declaration fails to provide the results related to the photothermographic properties disclosed in column 20, Table 1 in Biavasco such as Dim, Dmax, speed and contrast. Third, the results are not commensurate with the scope of the claimed invention. The results shown in the Declaration contains a mercapto compound while it is not claimed in the present claimed invention. Accordingly, the Declaration fails to overcome the prima facie case of obviousness set forth above.

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7. Claims 26, 28 are objected to because of the following informalities: in claim 26, the parentheses containing the definition of R_1 , and claim 28 containing the definition of R_5 should be removed since the languages between the parentheses are considered as optional. Appropriate correction is required.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *tlh*
December 9, 2005

Thorkhea
Thorl Chea
Primary Examiner
Art Unit 1752